

METHOD FOR DOWNLOADING DOCUMENTS BY USING MULTIMEDIA MESSAGING OF WIRELESS COMMUNICATION DEVICE

FIELD OF THE INVENTION

[0001] The present invention relates to a method for downloading documents by using multimedia messaging of a wireless communication device, and more particularly to a method for sending multimedia messages via Internet by personal computer. The multimedia messages to be sent are represented as downloaded documents and then transmitted to a designated wireless communication device via a network server to achieve the goal of downloading document.

BACKGROUND OF THE INVENTION

[0002] The contemporary world has experienced a booming development of information technology and electronic industry contemporary. Many high-tech products, mobile communication products and network communication technologies evolved from the computer technology have become smaller and smaller in size with more and more functions included therein, and yet cheaper and cheaper in price, making them become more and more popular. In particular, the most commonly seen mobile phone and personal digital assistant (PDA), which are closest to our daily life, have been widely adopted to shrink down the spatial and temporal separations between people. Since more and more kinds of communication products have been developed to replace the old ones, the consumers are demanding more and more functions to be integrated into one communication product. Therefore, the ability to provide a more convenient, more efficient communication product with more and more functions and services integrated therewith has become the most important indication of whether the manufacturer thereof can lead the market.

[0003] Currently, one method for downloading documents from the network is using a wireless communication by a personal computer to download the document first from the network. Then, the personal computer is connected with the wireless communication device, so as to transmit the downloaded document from the personal computer to the wireless communication device. Another method is using the wireless communication device to connect to the network to download the document directly. However, the method that using a personal computer to download documents requires the personal computer which installs a connection software, so as to connect with the wireless communication device. Therefore, such an inapplicable method is only useful for some personal computers which install within such connection software.

[0004] On the other hand, since the connection speed of downloading a document from network to the wireless communication device is rather slow, the method that downloads documents from the network directly using the wireless communication device will take too much time, which is also very inconvenient.

SUMMARY OF THE INVENTION

[0005] In light of the drawbacks of the conventional methods described above, the inventors of the present invention has studied and experimented all possible solutions thereof, and finally developed a method for downloading

documents by using multimedia messaging of a wireless communication device, so as to enhance the document download speed of the wireless communication device.

[0006] It is an object of the present invention to provide a method for downloading documents by using multimedia messaging of a wireless communication device. The method employs a personal computer that is connected with the Internet to send out multimedia messages. The multimedia messages to be sent are then represented as a downloaded document by using the simultaneous multimedia integration language (SMIL). The multimedia messages are then transmitted to a designated wireless communication device via a network server. After the multimedia messages are received in the wireless communication device, a pre-configured recognizer is used to recognize that the multimedia messages are the downloaded document, and sends out a response to the network server. In this manner, the downloaded document can be stored in the wireless communication device, or displayed on the wireless communication device. The purpose of rapidly downloading documents by using the multimedia messaging is thus achieved.

[0007] It is another object of the present invention to provide a method to calculate the network usage fee. After the network server receives the response, the network server can then calculate the appropriate fee for network usage based on the type and size of the downloaded document.

[0008] The above and other objects, features and advantages of the present invention will become apparent from the following detailed description taken with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] **FIG. 1** illustrates a structure diagram of the present invention.

[0010] **FIG. 2** illustrates a block diagram of a wireless communication device of the present invention.

[0011] **FIG. 3** is a flow diagram illustrating the process for receiving documents, in accordance with the present invention.

[0012] **FIG. 4** is a flow diagram illustrating the process for sending documents, in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0013] The present invention provides a method for downloading documents by using multimedia messaging of wireless communication device. Referring to **FIG. 1**, the method employs a personal computer **11** connected with the Internet to send multimedia messages (MMS). The multimedia messages to be sent are represented as download documents by using the simultaneous media integration language (SMIL). Then, the multimedia messages are sent to a designated communication device **13** through a network server **12**. After the multimedia messages are received in the wireless communication device **13**, a pre-configured recognizer is used to recognize that the multimedia messages are the downloaded document, and sends out a response to the network server **12**. In this manner, the wireless communication device **13** can store the downloaded document, or